



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|-----------------------------------|---------------------|------------------|
| 10/528,620 | 03/22/2005 | Johannis Friso Rendert Blacquiere | NL 020926 | 4135 |
| 24737 7590 03/20/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510 | | | | |
| EXAMINER LAMB, CHRISTOPHER RAY | | | | |
| ART UNIT 2627 | | PAPER NUMBER | | |
| MAIL DATE 03/20/2008 | | DELIVERY MODE PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/528,620

Applicant(s)

BLACQUIERE ET AL.

Examiner

Christopher R. Lamb

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date ____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. Claim 8 is objected to because of the following informalities: in line 6, both instances of "focussing" should be "focusing." Also, line 5 should end with "and."

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

This is a claim to a "computer program product," and thus appears to be a claim to a computer program *per se*. It is therefore considered non-statutory subject matter.

See MPEP 2106.01.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3-5, and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa et al. (US 6,850,469).

Regarding claim 1:

Ogawa discloses:

An optical disc comprising at least two writable layers and at least two defect management areas (column 12, lines 45-65: a "DMA" is a defect management area),

a first one of the at least two defect management areas being positioned on a first one of the at least two writable layers at a first radial position (there is one in the lead-in and lead-out of each layer, as per column 12, lines 45-65, and therefore there is "a first one" in the lead-in of the first layer),

a second one of the at least two defect management areas being positioned on a second one of the at least two writable layers at a second radial position being different than the first radial position (there is one in the lead-in and lead-out of each layer, as per column 12, lines 45-65, and therefore there is "a second one" in the lead-out of the second layer. Since the lead-out is on the outermost side of the disc and the lead-in on the innermost, the first and second DMAs are at different radial positions).

Regarding claim 3:

Ogawa discloses:

wherein the at least two defect management areas are evenly spread over a radial position on the disc (one is at a first side, the other at the other side, and therefore they are "evenly spread").

Regarding claim 4:

Ogawa discloses:

wherein one defect management area is located on each one of the at least two writable layers (column 12, lines 45-65: there are two on each layer, so there one on each layer, plus another).

Regarding claim 5:

Ogawa discloses:

wherein the first radial position is an inner side of the disc, and the second radial position is an outer side of the disc (column 12, lines 45-65: one is in the lead-in and one in the lead-out).

Regarding claim 8:

Ogawa discloses:

An apparatus for accessing an optical disc (Fig. 23) comprising at least two writable layers and at least two defect management areas being positioned on different ones of the at least two writable layers on different radial positions (column 12, lines 45-65, as discussed above), the apparatus comprising

an optical element for generating a light beam directed towards the optical disc and for receiving a reflected light beam being reflected by the optical disc while rotating (Fig. 23; column 19, lines 50-60),

a focusing circuit for focusing the light beam on one of the at least two writable layers (Fig. 23; column 19, line 55 to column 20, line 15).

Regarding claim 9:

Ogawa discloses:

A method of positioning defect management areas on an optical disc comprising at least two writable layers, the method comprises positioning at least two defect management areas on different ones of the at least two writable layers on different radial positions (column 12, lines 45-65, as discussed above).

Regarding claim 10:

Ogawa discloses:

a computer program product for recording information, which program is operative to cause a processor to perform the method as claimed in claim 9 (Fig. 23: the controller must contain a computer program product to function).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. (US 6,002,655) in view of Takahashi (US 5,878,020).

Regarding claim 1:

Ono discloses:

An optical disc comprising at least two writable layers (column 2, lines 20-25).

Ono does not disclose:

"at least two defect management areas, a first one of the at least two defect management areas being positioned on a first one of the at least two writable layers at a first radial position, a second one of the at least two defect management areas being positioned on a second one of the at least two writable layers at a second radial position being different than the first radial position."

Takahashi discloses:

at least two defect management areas (shown in Fig. 5: there is one at the beginning of every zone).

It would have been obvious to one of ordinary skill in the art to include in Ono a defect management area at the beginning of beginning of every zone, as taught by Takahashi.

The rationale is as follows:

Takahashi discloses the benefit of zone CLV control in column 1, lines 25-40: it allows the best of CAV and CLV control.

Takahashi discloses this defect management method improves the speed of file management in zone CLV control (column 1, lines 60-65).

Ono in view of Takahashi discloses:

at least two defect management areas (as taught by Takahashi, there is one at the beginning of every zone),

a first one of the at least two defect management areas being positioned on a first one of the at least two writable layers at a first radial position (as taught by Takahashi),

a second one of the at least two defect management areas being positioned on a second one of the at least two writable layers at a second radial position being different than the first radial position (since there are recordable zones on the second layer of Ono, it is obvious to also include defect management areas at the beginning of each zone on those layers; Ono discloses the discs are recording in opposite track paths in column 4, lines 50-65: therefore the beginning of a zone on the first layer is not in the same place as the beginning of a zone on the second layer).

Regarding claim 2:

Ono in view of Takahashi discloses:

wherein at the radial position of the first one of the at least two defect management areas no other defect management areas are positioned (the management areas are at the beginning of each zone; the two layers are recorded in opposite directions; therefore the beginning of each zone is in different places on the two layers).

Regarding claim 3:

Ono in view of Takahashi discloses:

wherein the at least two defect management areas are evenly spread over a radial position on the disc (any two of the defect management areas are "evenly spread" over a radial position: for example, take the first area on the first layer and the first area on the second layer. Since the layers are recorded in opposite directions, they are at opposite ends of the disc, and therefore evenly spread over it).

Regarding claim 4:

Ono in view of Takahashi discloses:

wherein one defect management area is located on each one of the at least two writable layers (there are multiple ones on each layer, so there is at least one).

Regarding claim 5:

Ono in view of Takahashi discloses:

wherein the first radial position is an inner side of the disc, and the second radial position is an outer side of the disc (the first is the inner side of the first zone of the first layer; the second the inner side of the first zone on the second layer, as discussed above, but since the second layer is recorded in the opposite direction, this is the outer side of the disc).

Regarding claim 6:

Ono in view of Takahashi discloses:

wherein the first radial position is an inner side of the disc (the first area is at the beginning of the first zone, so it is on an inner side, as seen in Takahashi Fig. 5), and

wherein a third one of the at least two defect management areas is present on the first one of the layers at a radial position corresponding to an outer side of the disc (since the second layer is recorded from the outside in, the area at the beginning of the zone on the second layer is on the outer side of the disc), and

wherein the second radial position is in-between the first radial position and the third radial position (there are multiple management areas, as shown in Takahashi Fig. 5, so at least some fall between the two positions).

Regarding claim 7:

Ono in view of Takahashi discloses:

wherein a plurality of the at least two defect management areas is located on the first layer on a plurality of different evenly distributed first radial positions (as per Takahashi Fig. 5), and

wherein a plurality of the at least two defect management areas is located on the second layer on a plurality of different evenly distributed second radial positions (as per Fig. 5, but reversed as for Ono's opposite path recording),

the first and second radial positions being selected to obtain substantially equal radial distances between defect management areas being successive in the radial direction (as can be seen in Takahashi Fig. 5, the areas are equally spaced: therefore there are equal radial distances between the successive areas on each layer).

Regarding claim 8:

Ono in view of Takahashi discloses:

An apparatus for accessing an optical disc (Ono Fig. 1) comprising at least two writable layers and at least two defect management areas being positioned on different ones of the at least two writable layers on different radial positions (taught by Takahashi as discussed above), the apparatus comprising

an optical element for generating a light beam directed towards the optical disc and for receiving a reflected light beam being reflected by the optical disc while rotating (Ono Fig. 1: the optical pickup 2),

a focusing circuit for focusing the light beam on one of the at least two writable layers (Ono Fig. 1: the focus actuator 3, plus the drive circuit, etc.).

Regarding claim 9:

Ono in view of Takahashi discloses:

A method of positioning defect management areas on an optical disc comprising at least two writable layers, the method comprises positioning at least two defect management areas on different ones of the at least two writable layers on different radial positions (taught by Takahashi as discussed above).

Regarding claim 10:

Ono in view of Takahashi discloses:

A computer program product for recording information, which program is operative to cause a processor to perform the method as claimed in claim 9 (the apparatus of Ono Fig. 1 is controlled by a controller, so it must have a processor with a computer program product to implement the method discussed as per claim 9).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lin (US 7,000,152) discloses multiple layers and defect management areas.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lamb whose telephone number is (571) 272-5264. The examiner can normally be reached on 9:00 AM to 5:30 PM Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 262-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph H. Feild/
Supervisory Patent Examiner, Art
Unit 2627

CRL 3/12/08